Original Article

Assessing Attitudes of Medical Students towards First Contact with Patient in Tehran (2016-17)

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Abstract

Background: Early experience of clinical arena as first situations can be effective in selection or refusing medicine as profession is so important that programmers and administrators should consider these settings as one of the most elements in educational programs.

Materials and Methods: This study was a cross-sectional study and including presently studying students in medicine field of medical sciences universities. Sample size was estimated for 275 students. Participants were selected from schools of medicine: Iran University (IUMS), Shahid Beheshti University, and Islamic Azad University using stratified random sampling method. Data was collected in March of 2016 by a researcher made questionnaire determined its validity and reliability. Data was analyzed using chi-squared test, t-test, Mann-Whitney and Kruskal-Wallis test.

Results: Mean score of medical students' attitude from 15 five-degree scale questions was 51.22 ± 6.32. The mean scores of attitude in men and women were 51.37±6.16 and 51.06±6.53, respectively (p=0.687). Overall, 13.8 % of students had positive attitude towards first contact with patient, 10.5 % of students had negative attitude and 75.6 % had no opinion. The mean scores of attitude towards first contact with patient in Iran university, Shahid Beheshti university and Islamic Azad university were 50.40±5.00, 52.71±5.91 and 46.12±5.97, respectively (p<0.001). The mean scores of attitude towards first contact with patient in reformed educational system and old educational system were 52.35±5.83 and 46.12±5.97 respectively, with a significant difference between two types of educational system (p<0.001).

Conclusion: As respects more positive attitude of students in reformed educational system in comparison with old educational system, special attention to courses of early contact with patient may contribute to decreasing educational insufficiency and distance between theory and practice and lead to the satisfaction all of beneficiaries.

Keywords: first clinical experience, medical students, attitude

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Introduction

Early experience of clinical arena as first situations can be effective in selection or refusing medicine as profession is so important that programmers and administrators should consider these settings as one of the most elements in educational programs[1,2]. Providing settings that are more attractive can lead to useful and effective consequences, since not only people effects on atmosphere and qualification of work settings but also settings will effect on them[3].

Studies indicate that early step of familiarity with real work arena and clinical settings can lead to experiencing emotional and mental issues and even physical changes[4]. With having desirable experiences in clinical settings and work arena, professional experiences form in students gradually and will give them a chance to recruit theoretical learned in real world of work and to coordinate imaginations with realities[5]. Researchers found that most of negative experiences of students from clinical arena are related to weak organization and undesirable relationship between university and clinic[6]. This undesirability and lack of attraction of work arena can decrease students' interest to their profession[7].

There are many studies in the field of clinical settings, but most of them have dealt with the issue of education in clinic and stressor factors in clinical education[8,9]. During clinical education student can develop problem-solving abilities in it, improve clinical skills[10,11], and encourage demonstrating them in the interventions[12]. It is necessary for forming a successful clinical experience to participate and cooperate collegiate and clinical centers[13]. Along with the changes in care systems, also medical schools need to adjust in clinical education programs especially first experience of student in entrancing the clinic[30,31].

The first contact with the patient in this study is the first contact with the patient in the hospital environment after the completion of the basic sciences and semiotics course.

The general purpose of this research is to investigate the attitude of students toward the first contact with a patient in Tehran during the school year of 2016. The other is to establish a framework for using the objective results of this study to improve the planning of medical education. Research questions included: What is the attitude of medical students about the first contact with the patient? Is the attitude of the girl and boy students different from the first contact with the patient? Does the attitude of the medical students of the Reform System differ from the first-time students of the old system?

First clinical experience considered as footstone in medical education. In past studies for interventional programs on medical students, positive effects on their attitude had considered[14]. Therefore, importance of dealing with problems of this field and perception of experiences of who involved in it cleared brightly, this research was performed to study medical students' attitudes to first experience of clinical settings.

Methods

This study was a cross-sectional study. The study population included male and female students studying medicine at the Iran University, Shahid Beheshti University, and Islamic Azad University that experienced the first clinical dealing in 2016 academic year.

At the beginning, literature review was conducted to design questionnaire. At this stage, seven relevant researches[15,16, 18-20,21,30] were reviewed and we could set initial questionnaire with 20 items. In the next step, to evaluate the validity of the questionnaire referring to the 10 referees, transparency, relevance and simplicity of each question was evaluated and then CVI index of questionnaire was calculated 0.824 that is acceptable. Two items were corrected and three items were eliminated. The comprehensiveness of the questionnaire obtained 3.68 score of maximum 4. Then, during a pilot study on 30 students the reliability of the questionnaire was assessed using Cronbach,s alpha 0.72 that was in acceptable range.

Data collected using a researcher made questionnaire that was prepared according to the purpose of the study and the review of same texts. The questionnaire was designed in two parts. First part of the questions was about demographic data. The second part contained questions for assessing attitude about the first contact with clinical setting, the ability to make correct and beneficial relation to the patient, the

efficacy of primary education on the first contact with patient and the ability to communicate properly with other members of the healthcare team and the mentor in the first contact with the patient in the form of Likret five degree scale. To scoring attitude, any item was given a score between 1 and 5 and due to the finalization of 17 items and according to the questionnaire the maximum possible score of attitude would be 85 which represent the most positive view of the first contact with the patient.

According to the formula $n = \frac{Z^2 \times P(1-P)}{d^2}$ and d=0.06, α=5% and due to the lack of previous studies in this area, p=50% considered, the sample size was estimated 275 students. 190 samples were chosen from Shahid Beheshti University of Medical Sciences, 50 samples from Islamic Azad University, the medical unit of Tehran and 35 samples from reformed educational system of Iran University of Medical Sciences.

Sampling was done as random stratified method. The population is divided into different stratas, depending on the attribute that makes them different (education system & university; the size of each strata is given above).Then participants were randomly based on the proportion of entrance and gender.

In order to collect data, questionnaire was delivered to the executor of each university after providing the necessary explanations about the purpose of the study. Corresponding executor provided arrangements for accessing to the participants and obtaining informed consent from them. Data analysis was done using, Mann-Whitney and Kruskal-Wallis test.

Results

As shown as at the table 1, 131 (47%) of students were women, 143 (52%) were male. Among all students, 42 (15%) were married and 233 (85%) were single. Participants were included 51 (18%) from Azad University of Tehran, 190 (69.1%) from of Shahid Beheshti University and 35 (12.9%) from Iran University. In this study, 225 (81%) in the new system of medical education (Reform) and 50 (18%) in the old system of medical education were studied. The maximum attitude possible score of the 17-item questionnaire with a scale of 5 degrees was 85. The

mean attitudes score of medical students of the study was 51.22±6.32. The maximum score in the statistical society is 72 and the lowest score is 29.The mean score in the men's attitudes was 51.37±6.16 and in the women 51.06±6.53. No significant relationship between the gender and attitudes to first clinical contact was observed (p=0.687). According to the maximum, minimum and average score, students with a score of 72 to 57 had a positive viewpoint and a score of 29 to 43 negative views. Overall, 13.8% students' had positive attitude, 10.5% had negative attitude and 75.6% of students had neutral attitude to the first clinical contact.

The mean attitude scores of first clinical contact was observed respectively 50.40 ± 5 in Iran University, 52.71 ± 5.91 at Shahid Beheshti University, 46.12 ± 5.97 in Tehran Azad University. A significant relationship between universities and attitude to the first clinical contact was observed (p<0.001).

The means attitude scores of the first clinical contact in the reformed educational system were 52.35 ± 5.83 and 46.12 ± 5.97 in the old educational system. A significant relationship between the educational system and attitude to the first clinical contact was observed (p<0.001). The means attitude scores of the first clinical contact were 53.16 ± 7.7 among married and 50.87 ± 5.97 among singles. A significant relationship between marital status and an attitude to first clinical contact was observed (p = 0.035).

The means attitude scores of the first clinical contact were 53.63 ± 5.93 in International Uint of Shahid Beheshti University of Medical Sciences (Pardis) and 52.04 ± 5.78 in public unit students (P =0.104).

36.7% of students mentioned that there is a large interference between the work of other staff and medical students, while 18.2% of students disagreed with this statement. 45.1% of students were able to make friendly and good communication with their trainer, while 28.7% of them were not able to communicate with their trainer. In this study 50.9% of students reported feeling anxiety when they first entered the hospital, whereas the 33.5% didn't have that feeling. In the first day course 52% of students felt they were unprepared, and 30.2% of students felt they were ready. 44% of students knew the patient's trust gaining; however, 35.6% of students not familiar with these principles and 20.4% of students had no

Table 1: Mean and standard deviation of attitude in terms of gender, marital status, educational system, training unit and university.

Variables		Mean	Standard deviation	P-value	Statistical test
Gender	Male	51.37	6.16	0.687	Mann-Whitney
	Female	51.06	6.53		
Marital status	single	50.87	5.97	0.035	Mann-Whitney
	married	53.16	7.70		
Educational system	reformed system	52.35	5.83		Mann-Whitney
	old system	46.12	5.97	0.001	
Training Unit	International Unit	53.63	5.93		
	Public Unit	52.04	5.78	0.104	Mann-Whitney
Universities	Shahid Beheshti	52.71	5.91		
	Azad	46.12	5.97	0.001	Kruskal–Wallis
	Iran	50.40	5.00		

opinions.

At present study, 55.6% of students prior to the first clinical experience received patient dealing training and 16.7% did not receive this training. 54.9% of the students in the first clinical experience reported that Basic courses training was effective and 19.6% reported that this training was ineffective. 34.5% of students were satisfied with a way of introducing students to the clinical group and 23.6% of students were dissatisfied.

Discussion

There are several reports of hopelessness and depression of students during early years of studying[15], and because of lack of information and experience, they feel inadequacy and being away from their medical path[16]. In this study 50.9% of students reported that they have felt anxiety when they first entered the hospital and it is intensified because of the unfamiliarity of the course and first encountering with the work environment. Some studies indicated "early Patients contact courses" that is same as in modern medical education system there could be a major part of familiarizing students to the

medical profession[17]. In this study, 55.6% of students prior to the first clinical experience had similar training courses. Studies have shown that early exposure to clinical and early skills training can facilitate passage of students and their entry into the health care environment[18-29]. In these study significant differences was seen between the students in different universities, a possible cause could be the early patient contact courses and their qualitative differences in different universities.

A study in England showed, one of the important characteristics of medicine field in comparison with other fields of study that is medical students while studying can have direct communication and acquaintance with their future profession and physician, and this has caused medical students more accurate picture and a more positive perception of their careers in comparison with other fields[19]. However, in the old educational system in Iran, students were deprived of this advantage until fourth year of study. In this study, attitude to the first clinical experience in the reformed educational system was more than the old educational system, which is consistent with the findings of the above studies.

Medical students with a great effort to pass the entrance exam with a zeal for learning and being physicians, and the images of a qualified physician entered the university and in the first year face with some of the basic science courses such as biochemistry, histology, anatomy and[30] .... No systematic notification occur about process of medical education during their 7 year ahead and their duties in this period and after it as a physician for them do not, which could affect their low academic satisfaction[20].

In the first clinical experience study, Rahimaghaee et al found that female students reported that students have not found what their like in their first experiences[21]. In this study, there was no significant difference between the females and males attitudes.

Research has shown that starting clinical training and transmission students from theoretical training to clinical conditions associated with stress[24,25]. In the present study students of 36.7% also noted that between the work of other medical personnel and students, there is a lot of interference. The trainer's role and relationship with students at the clinic is very critical and effective on the Clinical Education. So, the good relationship provides a real support for the student and his fear reduces[26]. Christine et al found that impact of the clinical trainers on the medical students' attitudes is 83% effective[1]. Results of the present study showed that with 45.1% of students were able to establish a good and intimate relationship with their trainer and, 28.7% were not able to communicate with their trainer.

In the present study, there was a significant correlation between the marital status and the viewpoint of the first contact with the patient (p = 0.035), which, of course, could be attributed to a higher age in married participants, and not merely the impact of marital status.

The findings of studies have shown that, lack of consistency in the application and implementation of the educational programs, inadequate management of human communication inside and outside an organization, lack of adequate understanding of student status, lack of proper control limits, proper use of facilitators in education and clinic, are the major challenges facing the process of training principles and techniques in the context of the study[32].

Conclusion

According to positive attitude of the students in reformed educational system compared to the old educational system, it is recommended that planning is done with the participation of all those involved in education and clinic and students involved in the internship as well as attention to the course of "early contact with patients", can be effective in reducing the failures of the educational, gap between theory and practice and satisfactory for all stakeholders to be obtained.

Acknowledgment

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